



# **Aviation Investigation Final Report**

**Location:** Milton-Freewater, Oregon **Accident Number:** GAA17CA110

Date & Time: January 9, 2017, 16:00 Local Registration: N9598Z

Aircraft: CHRISTEN INDUSTRIES INC A 1 Aircraft Damage: Substantial

**Defining Event:** Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of the tailwheel-equipped airplane reported that, while en route, the engine had "slight roughness," so he decided to land in an open snow-covered field on top of a hill to troubleshoot the issue. The pilot further reported that he resolved the engine issue on the ground and decided to take off downhill with a tailwind. During the takeoff roll, the pilot reported that he "noticed [wind] gust on the tail," the main landing gear were "sucked down" in a 1-ft-deep snow drift, and the airplane nosed over.

The left wing, fuselage, and vertical stabilizer sustained substantial damage.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's decision to take off from unsuitable terrain with a tailwind, which resulted in a nose-over.

### **Findings**

Personnel issues Aircraft control - Pilot

Personnel issues Decision making/judgment - Pilot

Environmental issues Snow/slush/ice covered surface - Decision related to condition

**Environmental issues** Tailwind - Effect on operation

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## **Factual Information**

### **History of Flight**

Takeoff	Other weather encounter
Takeoff	Miscellaneous/other
Takeoff	Loss of control on ground (Defining event)
Takeoff	Nose over/nose down
Takeoff	Collision with terr/obj (non-CFIT)

#### **Pilot Information**

Certificate:	Private	Age:	39,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	December 31, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 5, 2016
Flight Time:	(Estimated) 1057 hours (Total, all aircraft), 848 hours (Total, this make and model), 1057 hours (Pilot In Command, all aircraft), 21.7 hours (Last 90 days, all aircraft), 7.6 hours (Last 30 days, all aircraft)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	CHRISTEN INDUSTRIES INC	Registration:	N9598Z
Model/Series:	A 1 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1989	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1102
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 24, 2016 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1510 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-360-C1G
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KALW,1194 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	230°
<b>Lowest Cloud Condition:</b>		Visibility	10 miles
Lowest Ceiling:	Overcast / 4100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.72 inches Hg	Temperature/Dew Point:	3°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	COLLEGE PLACE, WA (S95	Type of Flight Plan Filed:	None
Destination:	Milton-Freewater, OR	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class G

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### **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	45.936111,-118.412223(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Erik Ramseyer; FAA; Portland, OR
Original Publish Date:	July 5, 2017
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94588

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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